



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,645	11/10/2003	Jeffrey L. McElray SR.	ABMS-0205/B000291	6138
23377	7590	12/05/2005	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			WILLOUGHBY, TERRENCE Ronique	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,645

Applicant(s)

MCELRAY ET AL.

Examiner

Terrence R. Willoughby

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,8-10,13,15-17,19,21-23 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,8-10,13,15-17,19,21-23 and 25-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/05/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities on page 7, lines 24-28, phrase "If the fault persists, this tripping and reclosing sequence is repeated a predetermined number of times, as set by the controller 20, until lockout function is initiated. If the fault was transient and cleared during any period when the recloser 10 was open, then the recloser 20 will remain closed after a short time delay reset to its original condition ready for the next operation." It is unclear as whether the recloser 10 or controller 20 will remain closed after a short time delay after the fault transient is cleared because the recloser 10 and controller 20 recited in the phrase above is not consistent with Figure 1 of the drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3,6,8-10,13,15-17,19,21-23,25-35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zulaski et al. (US 5,303,112) and in view of Shvach et al. (US 6,005,757).

Regarding claim 1, Zulaski et al. discloses a method for controlling (Fig.1, 11) a recloser (Fig.1, 22) for an electrical power line (Fig.1, 20) comprising: determining a protective device operations (column 1,lines 5-12) and determining a present condition (column 3, lines 58-62); and determining a behavior of function for the recloser based on the protective device operations and the present conditions (column 4, lines 15-30 and lines 41-56; see Tables I, II, III and Fig. 5 and 6); and adaptively setting the recloser to function in accordance with the behavior function (column 10, lines 58-68 and column 11, lines 1-5). Zulaski et al. lacks the protection setting group having at least one associated feature, wherein the at least one associated feature comprises one of time of day, day of week, and month of year.

However, Shvach et al. discloses a programmable tripping unit that uses various parameters to control tripping including time and date (col. 12, lines 59-64). It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the device of Zulaski et al. to incorporate the time and date as control parameter as disclosed in Shvach et al. because Zulaski et al. does not disclose what parameters were used in his sectionalizer and Shvach et al. teaches that time and dates are useful parameters when detecting faults.

Regarding claim 2, Zulaski et al. in view of Shvach et al. discloses the method according to claim 1, further comprising continuously monitoring the present condition and changing the behavior function responsive to the monitoring (Zulaski et al., column 2, lines 33-68 and column 3, lines 1-8).

Regarding claim 3, Zulaski et al. in view of Shvach et al. discloses the method according to claim 2, wherein monitoring the present condition comprises monitoring at predetermined intervals (Zulaski et al., column 4, lines 41-48).

Regarding claim 6, Zulaski et al. in view of Shvach et al. discloses the method according to claim 1, wherein the behavior function comprises one of fuse saving mode (column 3, lines 3-8) and fuse clearing mode (Zulaski et al., column 4; see Table I, Fault Location, (F2-F3)).

Regarding claim 8, Zulaski et al. discloses a recloser control system (Fig.1, 11) for an electrical power line, comprising: a recloser (22); a memory (column 6, lines 53-56); a recloser controller (15) and adaptively setting the recloser to function in accordance with a behavior function (column 10, lines 58-68 and column 11, lines 1-5). Zulaski et al. lacks the protection setting group stored in the memory means having at least one associated feature, wherein the at least one associated feature comprises one of time of day, day of week, and month of year.

However, Shvach et al. discloses a programmable tripping unit that uses various parameters to control tripping including time and date (col. 12, lines 59-64). It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the device of Zulaski et al. to incorporate the time and date as control parameter as disclosed in Shvach et al. because Zulaski et al. does not disclose what parameters were used in his sectionalizer and Shvach et al. teaches that time and dates are useful parameters when detecting faults.

Regarding claim 9, Zulaski et al. in view of Shvach et al. discloses the recloser control system according to claim 8, wherein the recloser controller (Zulaski et al., column 3, lines 59-63; column 5, lines 45-48; column 10, lines 45-47) monitors a present condition of each associated feature of each behavior function in the protection setting group, and determines the behavior function based on the present condition.

Regarding claim 10, Zulaski et al. in view of Shvach et al. discloses the recloser control system according to claim 8, wherein the recloser controller comprises the memory (column 3, lines 62-66; column 1, lines 1, 64-68; column 6, lines 54-55).

Regarding claim 13, Zulaski et al. in view of Shvach et al. discloses the recloser control system according to claim 8, wherein the at least one behavior function comprises one of fuse saving mode (column 3, lines 3-8) and fuse clearing (Zulaski et al., column 4, Table I, Fault Location, (F2-F3)).

Regarding claim 15, Zulaski et al. discloses a computer-readable medium (column 4, lines 11-14) having computer-executable instructions for performing steps comprising: a recloser (Fig. 1, 22) operating on an electrical power line (Fig. 1, 20); determining a protective device operations (column 1, lines 5-12) and determining a present condition (column 3, lines 58-62); and determining a behavior of function for the recloser based on the protective device operations and the present conditions (column 4, lines 41-56 and Tables I, II, III and Fig. 5 and 6); and adaptively setting the recloser to function in accordance with the behavior function (column 10, lines 58-68 and column 11, lines 1-5). Zulaski et al. lacks the protection setting group having at least one associated feature, wherein the at least one associated feature comprises one of time of day, day of week, and month of year.

However, Shvach et al. discloses a programmable tripping unit that uses various parameters to control tripping including time and date (col. 12, lines 59-64). It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the device of Zulaski et al. to incorporate the time and date as control parameter as disclosed in Shvach et al. because Zulaski et al. does not disclose what parameters were used in his sectionalizer and Shvach et al. teaches that time and dates are useful parameters when detecting faults.

Regarding claim 16, Zulaski et al. in view of Shvach et al. discloses the computer-readable medium according to claim 15, further comprising computer-executable instructions for continuously monitoring the present condition and changing the behavior function responsive to the monitoring. (Zulaski et al. see Abstract).

Regarding claim 17, Zulaski et al. in view of Shvach et al. discloses the computer-readable medium according to claim 16, wherein monitoring the present condition comprises monitoring at predetermined intervals (Zulaski et al., column 4, lines 44-48).

Regarding claim 19, Zulaski et al. in view of Shvach et al. discloses the behavior function comprises one of fuse saving mode (Zulaski et al., column 3, lines 3-8) and fuse clearing mode (Zulaski et al., column 4, Table I, Fault Location, (F2-F3)).

Regarding claim 21, Zulaski et al. in view of Shvach et al. discloses a method for protecting a recloser for an electrical power line, comprising: determining a protection setting group (Shvach et al., Fig. 3, 11 and column 12, lines 59-64) having at least one associated feature comprising load current (Zulaski et al., column 9, Table III, Loss of current (144,150)); determining a present condition (Zulaski et al., column 3, lines 58-62); Of a load current; determining a behavior of function for the recloser based on the protective device operations and the present conditions (Zulaski et al. ,column 4, lines 41-56 and Tables I, II, III and Fig. 5 and 6); and protecting the recloser by setting the

Art Unit: 2836

recloser to function in accordance with the behavior function (Zulaski et al. ,column 3, lines 52-62).

Regarding claim 22, Zulaski et al. in view of Shvach et al. discloses a method according to claim 21, wherein protecting the recloser comprises modifying control of the recloser based on the load current (Zulaski et al., column 9, Table III, Loss of current (144,150)).

Regarding claim 23, Zulaski et al. in view of Shvach et al. discloses a method according to claim 21, further comprising continuously monitoring the present condition and changing the behavior function responsive to the monitoring.

Regarding claim 24, Zulaski et al. in view of Shvach et al. discloses a method according to claim 23, wherein monitoring the present condition comprises monitoring at predetermined intervals.

Regarding claim 25, Zulaski et al. in view of Shvach et al. discloses a method according to claim 21, wherein the behavior function comprises one of fuse saving mode and fuse clearing mode.

Regarding claim 26, please refer to the recited claimed for rejection as mentioned above in claim 15.

Regarding claim 27, please refer to the recited claimed for rejection as mentioned above in claim 22.

Regarding claim 28, please refer to the recited claimed for rejection as mentioned above in claim 16.

Regarding claim 29, please refer to the recited claimed for rejection as mentioned above in claim 17.

Regarding claim 30, please refer to the recited claimed for rejection as mentioned above in claim 19.

Regarding claim 31, please refer to the recited claimed for rejection as mentioned above in claim 8.

Regarding claim 32, please refer to the recited claimed for rejection as mentioned above in claim 9.

Regarding claim 33, please refer to the recited claimed for rejection as mentioned above in claim 2.


Regarding claim 34, please refer to the recited claimed for rejection as mentioned above in claim 10.

Regarding claim 35, please refer to the recited claimed for rejection as mentioned above in claim 13.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Willoughby whose telephone number is 571-272-2725. The examiner can normally be reached on 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800